FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD (FONSI/DR)

CO-110-2004-188-EA

Reference: Environmental Assessment Record CO-110-2004-188-EA, Meeker Pipeline and Gas Plant (COC67980), Department of the Interior, Bureau of Land Management, White River Field Office

Finding of No Significant Impact: The Bureau of Land Management (BLM) has determined that the actions proposed by EnCana Oil and Gas (USA) Inc. (EnCana), to construct, operate, and maintain a gas plant, and approximately 205 miles of natural gas, natural gas liquids and water pipelines, and related facilities installed in 93 miles of designated/existing corridor, will not have significant impacts on the human environment. Therefore, an environmental impact statement (EIS) is not required. BLM's determination is based on the analysis of the potential environmental impacts from this action contained in the Environmental Assessment (EA) CO-110-2004-188-EA and consideration of comments received during a 30-day public review of this EA. BLM responses to public comments can be found in Table 7-6 of the EA. BLM's determination also relies on and adopts the BLM standard practices applied to surface-disturbing activities, and the additional environmental protection measures identified in the mitigation section and attached as Exhibit M, Special Stipulations, of the Right of Way Grant.

Decision Record and Rationale: It is BLM's decision to approve the construction, operation, and maintenance of a gas plant; construction, operation, and maintenance of approximately 4 miles of 36-inch diameter natural gas pipeline, 44.5 miles of up to 30-inch diameter natural gas pipeline, 43 miles of up to 16-inch diameter natural gas pipeline, 48 miles of up to 12-inch diameter Natural Gas Liquids (NGL) pipeline, 21 miles of up to 12-inch diameter natural gas or water pipeline, 44.5 miles of up to 10-inch diameter NGL pipeline, and related above ground appurtenances; and conversion of the existing American Soda water/sodium slurry pipelines to natural gas, natural gas liquids, and/or water pipelines. The facilities would be constructed, operated and maintained as described in the proposed action section of the attached EA, and the plan of development filed with this office. Payment of fair market rental would be required, as would submission of a bond in the amount of \$2,000,000. This action is in conformance with decisions contained in the White River Record of Decision/Approved Resource Management Plan (ROD/RMP) approved July 1, 1997, the Grand Junction Resource Management Plan (ROD/RMP) approved January 29, 1987, and the Bookcliffs (Vernal Field Office) Resource Management Plan (ROD/RMP) approved June 3, 1985.

Approximately 40 miles of this right-of-way would be located in formally designated right-of-way corridors. The west branch of the Collins Gulch South Corridor (Meeker South section) and the Park Canyon – Magnolia Corridor (Meeker West Section) were designated in the White River ROD/RMP for placement of buried linear facilities. Each is a mile wide. Most of the remaining right-of-way parallels existing pipelines.

A rare plant survey was conducted to determine the presence or absence of Special Status Species of plants and their suitable habitat. No individual plants, populations of federally listed

threatened, endangered and/or candidate species were encountered. While potential habitat exists near the plant site, it was determined to be unsuitable. Based on the survey results, it was determined that the project would have "no effect" on any federally listed plant species or habitat and it will not be necessary to include plants in the Biological Assessment (BA) for the project.

The BA states that a small amount of the project area is within winter foraging area for the bald eagle, and that the proposed project is not likely to adversely affect listed bird species or their habitats. The US Fish and Wildlife Service (Service) concurs that the proposed project may affect but is not likely to adversely affect the bald eagle or its habitat. The Service recommends winter conservation measures for the bald eagle that include a prohibition on cutting down any native tree on BLM land that is 12 inches diameter at breast height (dbh) or greater, and is within 100 feet of a river bank or other foraging area. This recommendation was included in the mitigation.

Submission of a bond is being required due to the size of the gas plant being authorized, and the acreage being encumbered. The size of the bond (\$2,000,000) is commensurate with that imposed for the nearby, recently "moth balled" American Soda Plant.

BLM involved interested members of the public through a public meeting and allowed interested members of the public 30 days to review and provide comments on the EA. This public involvement in the agency's National Environmental Policy Act (NEPA) procedures is addressed in 43 CFR 1506.6. Before making its decision of approval, BLM considered all comments received during the review period and have incorporated them into the final document. BLM responses to public comments can be found in Table 7-6 of the EA.

Mitigation

- 1. The holder shall minimize construction impacts to air quality by acquiring Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division (APCD) construction emissions permits, complying with permit stipulations, and implementing emission control measures proposed in EnCana's Fugitive Dust Control Plan (EnCana 2005g), included in the Plan of Development (EnCana 2005a). The holder shall:
- Maintain and tune equipment to manufacturers' specifications.
- Transport the majority of workers from contractor yards to the construction site in buses provided by the contractor.
- Limit opacity of fugitive dust to 20 percent or less.
- Apply water and/or an approved dust suppressant on unpaved roads and construction workspaces.
- Clean soil tracked onto paved roads more than 50 feet from the point of origin within one hour of discovery and clean soil tracked less than 50 feet from the point of origin by the end of the working day.

- Cease construction operations when wind speeds exceed 30 miles per hour (mph).
- Limit vehicle speed to 15 mph on the right-of-way and to posted speed limits on roads.
- Seed disturbed areas as discussed in the Vegetation section.
- 2. The holder will obtain permits for regulated air pollution sources through the CDPHE APCD to ensure compliance with all federal and state air quality standards, and would comply with all county and state permit conditions and stipulations.
- 3. Construction activities would remain inside the existing disturbance footprint (125 feet wide) within the Ryan Gulch ACEC between Meeker-South mileposts 42.6 and 43.4.
- 4. The holder shall minimize impacts to cultural resources by implementing the following measures. These measures will be incorporated into EnCana's Cultural Resources Protection Plan (EnCana 2005d), included in the Plan of Development (EnCana 2005a). The holder shall:
- Avoid known cultural resource sites by realigning the centerline, removing temporary use areas, not utilizing the entire construction workspace, and/or completing data recovery.
- Test recommended sites to determine eligibility to the NRHP. If the sites were not eligible, no further mitigation would be necessary. If the sites are eligible, either the sites would be avoided by shifting the centerline or data recovery would occur.
- Monitor eight sites (4 previously recorded, 3 newly recorded, and 1 potential area) within or adjacent to the right-of-way during construction.
- Monitor construction activities within the Canyon Pintado NHD.
- Inform all persons associated with the project that they would be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, activities would stop in the immediate area of the find, and the BLM Authorized Officer would be immediately contacted. Within five working days, the BLM Authorized Officer would inform the holder as to:
 - whether the materials appear eligible for the NRHP,
 - the mitigation measures the holder will likely have to undertake before the site can be used (assuming in situ preservation is not practicable), and
 - a timeframe for the BLM Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the SHPO, that the findings of the BLM Authorized Officer were correct and that mitigation was appropriate.
- Notify the BLM Authorized Officer by telephone and with written confirmation, immediately upon discovery of human remains, funerary items, sacred objects, or objects of cultural

patrimony. Activities would stop in the immediate area of the find, and the discovery would be protected for 30 days or until notified to proceed in writing by the BLM Authorized Officer.

- 5. The holder shall minimize impacts to prime farmland soils by implementing measures for the proper handling of topsoil and spoil, erosion control, and reclamation procedures as proposed in EnCana's Reclamation Plan (EnCana 2005j), Noxious Weed Management Plan (EnCana 2005h), and Soil Conservation, Sedimentation, and Erosion Control Plan (EnCana 2005l) included in the Plan of Development (EnCana 2005a). The holder shall:
- Segregate up to 12 inches of topsoil from the entire construction workspace and temporary use areas, unless requested otherwise by the fee-landowner, to prevent mixing of topsoil and subsoil layers.
- Stockpile topsoil separately from subsoil.
- Compact the pipeline trench during backfill activities to prevent subsidence.
- Rip or plow compacted subsoil at least 6 to 10 inches deep before replacing segregated topsoil across the right-of-way.
- Return topsoil to pre-construction depths and locations.
- Remove rocks from the top 12 inches of soil and make diligent efforts to remove stones greater than 4 inches in any dimension if the off-right-of-way areas do not contain stones greater than 4 inches in any dimension.
- 6. The holder shall mitigate impacts to floodplains by implementing measures proposed in EnCana's Waterbody Crossing and Wetland Protection Plan (EnCana 2005q), included in the Plan of Development (EnCana 2005a). The holder shall:
- Cross drainages perpendicular to the stream channel, where topographic conditions allowed.
- Bury pipelines at least 5 feet deep in areas within the 100-year floodplain and/or use acceptable engineering practices to ensure negative buoyancy during flood events.
- 7. The holder shall implement the following measure, which will be incorporated into the Plan of Development:
- Assess the pipeline route along perennial streams, and East Douglas, West Douglas, and Texas, Missouri and Evacuation Creeks in accordance with Hydraulic Considerations for Pipeline Stream Crossings (BLM 2003b) to determine if additional mitigation measures are necessary. If necessary, a combination of the following measures would be implemented to protect against scour and bank erosion:
 - bury pipelines below scour depth;
 - use concrete-coated pipe or set-on weights; and/or

- implement other acceptable engineering practices.
- 8. The holder shall mitigate impacts to invasive, non-native species by implementing measures to treat existing infestations, prevent introduction/expansion of infestations during construction, and monitor and treat infestations after construction is complete as proposed in EnCana's Noxious Weed Management Plan (EnCana 2005h), included in the Plan of Development (EnCana 2005a). The holder shall:
- Conduct pre-construction field surveys, each spring prior to construction, to identify existing noxious weed infestations within the project area.
- Consult with BLM and local weed agencies to determine pre-treatment for noxious weed infestations identified during spring surveys.
- Require vehicles and equipment to arrive at the work site clean, power-washed, and free of soil and vegetative debris capable of transporting weed seeds or other propagules.
- Install wash stations at designated infestation areas. Equipment would be power-washed to remove soil and propagules prior to leaving the infested areas. Wash station locations would be determined in conjunction with the BLM and local weed agencies after spring surveys have been completed.
- Use certified weed-free erosion control and reclamation materials.
- Monitor the distribution and density of noxious weeds on the right-of-way, and control and/or eradicate any new or expanded population for the life of the pipelines and gas plant.
- 9. The holder shall minimize impacts to migratory birds by implementing the following measures. These measures would be incorporated into EnCana's Biological Resources Protection Plan (EnCana 2005b), included in the Plan of Development (EnCana 2005a). The holder shall:
- Conduct pre-construction migratory bird surveys each spring prior to construction to identify active nests within the project area. BLM-approved biologists would be required to meet with BLM biologists prior to initiating surveys, and would conduct the surveys using BLM survey protocols.
- Implement standard nest avoidance, timing restrictions, and/or additional mitigation measures for nests located on or adjacent to the right-of-way. The FWS would be consulted with if any special status species nests were discovered on or adjacent to the right-of-way.
- 10. The holder shall minimize impacts to special status species by implementing the following measures. These measures will be incorporated into EnCana's Biological Resources Protection Plan (EnCana 2005b), included in the Plan of Development (EnCana 2005a). The holder shall:
- Avoid construction activities in Utah between November 1st and March 31st to protect wintering bald eagles.

- Prohibit clearing or cutting of native trees greater than 12 inches in diameter (at breast height) within 100 feet of a riverbank or other BLM-prescribed foraging area on BLMadministered lands.
- Prohibit construction activities in bald eagle wintering range in Colorado between November 15th and April 15th.
- Conduct pre-construction surveys, each spring prior to construction, to identify active goshawk nests present near or adjacent to the construction right-of-way. BLM-approved biologists would be required to meet with BLM biologists prior to initiating surveys, and would conduct the surveys using BLM survey protocols. Construction activities would not occur within 0.5-miles of active goshawk nests between February 1st and August 15th in Colorado or between April 15th and August 15th in Utah, or until fledgling and dispersal of the young.
- 11. The holder shall implement the following measures to mitigate potential impacts on Greater sage grouse:
 - Complete sage grouse presence surveys, habitat assessment, and review of historical lek sites each spring prior to construction. BLM-approved biologists would be required to meet with BLM biologists prior to initiating surveys, and would conduct the surveys using BLM survey protocols.
 - Impose timing restrictions (seasonal and daily) in areas of known sage grouse activity or suitable habitat. Surface disturbing activities would not be allowed between March 1st and May 31st in sage grouse lek areas, would not be allowed between April 15th and July 7th in sage grouse production areas, and would not be allowed between December 16th and March 15th in winter range. Additional timing restrictions could be imposed based on results of pre-construction surveys.
 - Restrict broadcast spraying of herbicides for noxious weed control in sage grouse habitat unless approved by the BLM Authorized Officer or field representative. All weed control programs in sage grouse habitat would use integrated weed management techniques to reduce the area of treatment and minimize adverse side effects.
 - Seed disturbed areas with a seed mix designed to reestablish sagebrush and forb species. Sagebrush used for reseeding would be collected from local species. Distribution of sagebrush would be dependent upon range site (i.e., *Artemesia tridentata* spp. *vaseyana* and spp. *wyomingensis*). Reclamation on these sites should use seed mixes and seeding methods that include and promote successful establishment of full complement of grasses and favored native forbs. The following forbs would be included in reclamation seed mixes as appropriate throughout sage grouse range on lands administered by the BLM WRFO and it is recommended that these components would be applied to fee-lands under the holder's control or lease: 1) scarlet globemallow, 2) Utah sweetvetch, 3)

- arrowleaf balsamroot, 4) Lewis flax, and 5) Rocky Mountain penstemon. See sage grouse seed mixes in stipulations 19 & 20.
- Additional vegetation clearing to enhance sage grouse habitat would be negotiated between the BLM and the CDOW. If habitat along the existing right-of-way and the surrounding area is determined to be unsuitable due to advanced vegetation succession (e.g., pinyon-juniper regeneration, encroaching serviceberry, etc.), expansion of vegetation removal will be applied along the right-of-way to reclaim a larger area of suitable cover for sage grouse. Where possible, the proposed right-of-way would be shifted to maximize clearing of encroaching vegetation. These areas would be identified during pre-construction sage grouse habitat surveys.
- Establish and maintain permanent enclosures on each of the mid- and high-elevation sage grouse habitat intervals. Enclosures will be established as a means of determining the ultimate success of forbs in the reclamation seed mix and will be designed to exclude cattle and wild horses, with dimensions of 100 feet paralleling the right-of-way and a width that spans the fully authorized temporary construction right-of-way. The location of these structures would be subject to approval of the BLM Authorized Officer. General locations on BLM lands are Meeker-South milepost 23.0 and 24.0 (mid-elevation sage grouse habitat), Meeker-West milepost 12.0 and 13.0 (mid-elevation sage grouse habitat interval), and west of Meeker-West milepost 14.0 (high-elevation sage grouse habitat). The BLM requests that, in the interest of sage grouse conversation, the holder shall arrange to establish a similar enclosure on private lands in the Meeker-South high elevation segment south of Meeker-South milepost 22.0.
- Implement measures determined by the FWS to mitigate proposed depletions and impacts to Colorado River endangered fishes.
- 12. Construction impacts to BLM sensitive plant species and habitat identified during spring surveys would be avoided or minimized. Avoiding impacts would be prioritized over minimizing impacts. Mitigation measures would be incorporated into EnCana's Biological Resources Protection Plan (EnCana 2005b), included in the Plan of Development (EnCana 2005a). The holder shall:
- Install temporary and permanent erosion control measures, as discussed in the Soils section, to control erosion and transport of sediment.
- 13. The holder shall implement the following measures, which would be incorporated into the Plan of Development:
- Avoid plants that occur along the outside edge of the right-of-way and install exclusion fencing to prevent disturbance from construction activities.

Debris milkvetch

- o Salvage top two inches of soil and stockpile separately from subsoil.
- o Seed disturbed areas with Standard WRFO Seed Mix (refer to stipulations 19 & 20).

Piceance bladderpod

o Seed disturbed areas with Standard WRFO Seed Mix (refer to stipulations 19 & 20).

Adobe Thistle

- o Seed disturbed areas with Standard GJFO Seed Mix (refer to stipulations 19 & 20).
- 14. The holder shall minimize solid and hazardous waste impacts by implementing measures proposed in EnCana's Plan of Development and Spill Prevention, Containment, and Countermeasure Plan (EnCana 2005m), included in the Plan of Development (EnCana 2005a). The holder shall:
- Maintain the project area in a sanitary condition at all times.
- Provide an adequate number of trash containers on-site.
- Dispose trash and nonflammable wastes at an appropriate waste disposal site.
- Provide portable toilets on-site. Contents would be removed and disposed of in accordance with applicable laws and regulations.
- Use, store, transport, and/or dispose of hazardous materials in accordance with applicable federal and state laws.
- Implement spill prevention measures, inspection and training requirements, and spill response and notification procedures to minimize the potential for accidental spills or leaks.
- 15. The holder shall obtain necessary federal and state permits, and would comply with the Corps of Engineers (COE) Nationwide Permit 12 conditions, CDPHE Water Quality Control Division (WQCD) Minimal Industry Discharge Permit conditions, Utah Department of Environmental Quality (UDEQ) Department of Water Quality (DWQ) Construction Dewatering/Hydrostatic Testing Permit conditions. Impacts to water quality would be minimized by implementing measures proposed in EnCana's Waterbody Crossing and Wetland Protection Plan (EnCana 2005q) and Strength Testing Plan (EnCana 2005o), included in the Plan of Development (EnCana 2005a). The holder shall:
- Install temporary equipment bridges across flowing waterbodies.
- Place topsoil and spoil at least 10 feet away from the waters edge.
- Bury the pipeline at least 5 feet below the bottom of each drainage.
- Cross streams during periods of low flow and complete the crossing within 24 hours, as feasible.

- Install erosion and sediment control measures, as discussed in the Soils section, to prevent the flow of spoil into any waterbodies.
- Maintain erosion and sediment control measures until streambanks and adjacent upland areas are stabilized.
- Reestablish pre-construction bed and bank contours, revegetate streambanks, and install erosion control fabric to stabilize the streambanks.
- Direct trench-dewatering discharges onto a well-vegetated, stable surface and utilize a section of geotextile fabric or plywood to prevent scouring during discharge.
- Locate trench-dewatering discharges as far as practicable from waterbodies and wetlands (considering local topography, vegetation, and soils).
- Minimize duration of trench dewatering discharges by scheduling dewatering operations immediately prior to lowering in, tie-ins, or backfilling. Minimize trench disturbance (i.e., additional digging) to the extent practicable until the majority of the water is pumped out.
- Prohibit storage of hazardous materials, chemicals, fuels, lubricating oils, and concrete coating and refueling activities within 200 feet of any waterbody or wetland.
- Minimize erosion from upland areas by restoring and seeding the project area as discussed in the Vegetation and Soils sections.
- Withdraw and discharge hydrostatic test water in accordance with all applicable permits.
- Test water quality during withdrawal and discharge in accordance with permit stipulations and conditions.
- Utilize screens on the intake hoses at surface water sources to prevent the entrapment of fish or other aquatic species and monitor the appropriation rate to ensure that adequate downstream flow is maintained to support aquatic life.
- Install energy-dissipating devices and/or filter bags to prevent scour, erosion, suspension of sediment, and damage to vegetation. Monitor discharge rates to ensure effectiveness of the energy-dissipating device.
- 16. The holder shall minimize impacts on wetlands and riparian areas by obtaining and complying with the COE Nationwide Permit 12 conditions and by implementing measures to lessen the duration of disturbance, reduce the soil disturbance, and enhance restoration as proposed in EnCana's Waterbody Crossing and Wetland Protection Plan (EnCana 2005q), included in the Plan of Development (EnCana 2005a). The holder shall:
- Limit construction equipment working in wetlands to that essential for clearing, trench excavation, pipe fabrication and installation, backfilling, and restoration.

- Cut shrubs flush with the surface of the ground.
- Limit stump removal, grading, topsoil segregation, and excavation to the area immediately over the trenchline to avoid excessive disruption of soils and the native seed and rootstock within the soils.
- Install and maintain sediment barriers, as discussed in the Soils section, to minimize the potential for sediment runoff into surface waters.
- Prohibit storage of hazardous materials, chemicals, fuels, lubricating oils, concrete coating, and refueling activities within 200 feet of any wetland or riparian area.
- 17. The holder shall implement the following measure, which will be incorporated into the Plan of Development.
- Fence the riparian areas on BLM-administered lands at Meeker-West milepost 24.5 (East Douglas Creek) and Meeker-West milepost 27.2 (West Douglas Creek). Fence will be installed around the incised banks and channel with a sufficient gap to allow passage of wildlife or livestock up or down the channel.
- 18. The holder shall minimize impacts to soils by implementing measures proposed for the proper handling of topsoil and spoil, erosion control, and reclamation procedures from EnCana's Reclamation Plan (EnCana 2005j), Noxious Weed Management Plan (EnCana 2005h), and Soil Conservation, Sedimentation, and Erosion Control Plan (EnCana 2005l) included in the Plan of Development (EnCana 2005a). The holder shall:
- Limit clearing and vegetation removal to the extent practical to provide for safe construction.
- Salvage topsoil as required by the BLM and fee-landowners:
 - BLM GJFO and VFO lands—up to 6 inches across the trenchline and working side
 - BLM WRFO lands—up to 6 inches across the trenchline only
 - Fee-lands—unless otherwise directed by the fee-landowner, up to 6 inches across the trenchline, except irrigated agricultural fields where up to 12 inches will be stripped across the entire right-of-way
 - All areas requiring grading—up to 6 inches across the entire right-of-way
- Stockpile topsoil separately from subsoil to prevent mixing of soil layers.
- Decompact subsoil to a depth of 6 to 10 inches prior to topsoil replacement. In areas where topsoil was not salvaged, topsoil would be decompacted as necessary.
- Restore pre-construction contours and natural drainage patterns.
- Return topsoil to pre-construction depths and locations.

- Install temporary and permanent erosion control measures (i.e., silt fence, straw bales, waterbars, driveable berms) to control the erosion and transport of sediment.
- Use vegetative mulch and excess rock to reduce erosion potential by providing additional surface relief structure.
 - Distribute vegetative debris salvaged during clearing and grading operations across the right-of-way, as discussed in stipulations 19 & 20.
 - Layer rock on the surface of erodible soils in critical areas to reduce erosion and restore appearance of native surface.
 - Apply mulch on slopes 30 percent or steeper.
 - Install erosion control matting on slopes 40 percent or steeper.
- 19. The holder shall minimize impacts to vegetation by implementing measures proposed in EnCana's Soil Conservation, Sedimentation, and Erosion Control Plan (EnCana 2005l), Noxious Weed Management Plan (EnCana 2005h), and Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Minimize vegetation removal to the extent necessary to allow for safe and efficient construction activities.
- Cut trees with a chain saw and/or mechanical shears and cut brush with a hydro-ax or similar equipment as close to the ground as possible.
- Leave stumps and root balls in place except over the trenchline, areas requiring topsoiling, or as necessary to create a safe and level workspace. Fell trees inside the approved right-of-way boundaries.
- Shred or chip brush and salvage with topsoil on fee-lands (unless specified otherwise).
- Salvage and replace topsoil, as discussed in the Soils section, to preserve and replace existing seed banks and return organic matter needed for seed establishment to the soil.
- Restore pre-construction contours, drainage patterns, and topsoil.
- Prepare a seedbed (scarifying, tilling, harrowing, or roughening) prior to seeding where needed to improve revegetation potential.
- 20. The holder shall implement the following measures, which will be incorporated into the Plan of Development:
- Salvage 3 to 5 tons/acre of brush and trees whole on BLM lands administered by the WRFO. Stockpile material for later use in reclamation. Remaining brush and trees may be shredded or chipped and salvaged with topsoil or may be made available to the public as firewood or fenceposts.

- Shred or chip brush and salvage with topsoil on BLM lands administered by the GJFO and VFO. Make timber available to the public for firewood or fenceposts on BLM GJFO-administered lands. De-limb the wood, cut in 4- to 8-foot lengths, and stockpile on the right-of-way or within approved temporary use areas at points where the right-of-way crosses access roads.
- Seed disturbed areas with the goals of replacing suitable wildlife habitat and browse and providing a vegetative cover that stabilizes soils to control erosion and sedimentation. Typical seed mixes would reflect environmental conditions and ecological range sites along the project route and emphasize the use of native species. Seed mixes, rates, and application areas are provided in Table 4-23 and in the Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a).

Table 4-23 Seed Mixes

Species	Rates ¹ (lbs PLS/a)	Application Areas (mileposts)
Standard GJFO Seed Mix		
Western Wheatgrass (Arriba)	3.0	Meeker-South 0.0 to 6.0
Pubescent Wheatgrass (Luna)	3.0	
Indian Ricegrass (Paloma)	2.5	
Four-wing Saltbush (Rincon)	1.0	
Shadscale	<u>1.0</u>	
	10.5	
High Elevation Sage Grouse Seed Mix		
Bluebunch wheatgrass (Secar)	1.0	Meeker-South 6.0 to 22.0
Slender wheatgrass (Pryor)	1.0	Meeker-West 13.0 to 19.0
Big bluegrass (Sherman)	1.0	
Canby bluegrass (Canbar)	1.0	
Mountain brome (Bromar)	1.0	
Blue flax (Appar)	0.5	
Rocky mountain penstemon	0.5	
Arrowleaf balsamroot	1.0	
Utah sweetvetch	<u>1.0</u>	
	8.0	
Mid-Elevation Sage Grouse Seed Mix		
Western wheatgrass (Rosanna,)	1.0	Meeker-South 22.0 to 30.0
Indian ricegrass (Rimrock)	1.0	Meeker-West 9.0 to 13.0
Bluebunch wheatgrass (Whitmar)	1.0	
Thickspike wheatgrass (Critana)	1.0	
Letterman needlegrass	1.0	
Globemallow	0.5	
Utah sweetvetch	1.0	
Arrowleaf balsamroot	<u>1.0</u>	
	7.5	
Standard WRFO Seed Mix (Native Seed Mix	#2)	
Western wheatgrass (Rosanna)	2.0	Meeker-South 30.0 to 38.0
Indian ricegrass (Rimrock)	1.0	Meeker-South 43.0 to 44.5

Table 4-23 Seed Mixes

Species	Rates ¹ (lbs PLS/a)	Application Areas (mileposts)
Bluebunch wheatgrass (Whitmar)	2.0	Meeker-West 0.0 to 9.0
Thickspike wheatgrass (Critana)	2.0	Meeker-West 19.0 to 48.8
Globemallow	0.5	
Fourwing saltbush (Wytana)	<u>1.0</u>	
- · · · · ·	8.5	

¹ All seeding rates are lbs Pure Live Seed (PLS) per acre.

- Use certified weed-free seed purchased from and blended by qualified producers and dealers.
- Employ drill or broadcast seed methods to ensure proper seed placement. Drill seeding is preferred and would be used wherever soil characteristics and slope allow effective operation of a rangeland seed drill. Drill seeding would be performed perpendicular to the slope. Seed would be placed in direct contact with the soil at an average depth of 0.5-inches, covered with soil, and firmed to eliminate air pockets around the seeds. Broadcast seeding would be employed only in areas where drill seeding is unsafe or physically impossible. Seed would be applied uniformly over disturbed areas with manually operated cyclone-bucket spreaders, mechanical spreaders, or blowers. Broadcast application rates would be twice that of drill rates. The seed would be uniformly raked, chained, dragged, or cultipacked to incorporate seed to a sufficient seeding depth.
- Complete drill and/or broadcast seeding prior to redistribution of woody material.
- Redistribute large, woody material salvaged during clearing operations on BLM WRFOadministered lands. Disperse materials over the portion of the right-of-way from which the trees and brush were originally removed to meet fire management objectives and to provide wildlife habitat, seedling protection and a deterrent to vehicular traffic. Woody materials dispersed across the right-of-way will not exceed 3 to 5 tons/acre.
- Establish and maintain permanent enclosures on each of the mid- and high-elevation sage grouse habitat intervals. Enclosures would be established as a means of determining the ultimate success of forbs in the reclamation seed mix and would be designed to exclude cattle and wild horses, with dimensions of 100 feet paralleling the right-of-way and a width that spans the fully authorized temporary construction right-of-way width. The location of these structures would be subject to approval of the BLM Authorized Officer. General locations on BLM lands are Meeker-South milepost 23.0 and 24.0 (mid-elevation sage grouse habitat), Meeker-West milepost 12.0 and 13.0 (mid-elevation sage grouse habitat interval), and west of Meeker-West milepost 14.0 (high-elevation sage grouse habitat). The BLM requests that, in the interest of sage grouse conservation, the holder shall arrange to establish a similar enclosure on private lands in the Meeker-South high elevation segment south of Meeker-South milepost 22.0.
- 21. The holder shall minimize impacts to aquatic wildlife by obtaining and complying with the COE Nationwide Permit 12 conditions and by implementing measures proposed in EnCana's

Waterbody Crossing and Wetland Protection Plan (EnCana 2005q), Soil Erosion, Sedimentation, and Erosion Control Plan (EnCana 2005l), and Strength Testing Plan (EnCana 2005o), included in the Plan of Development (EnCana 2005a). The holder shall:

- Install temporary equipment bridges across flowing waterbodies.
- Place topsoil and spoil at least 10 feet away from the waters edge.
- Bury the pipeline at least 5 feet below the bottom of each drainage.
- Cross streams during periods of low flow and complete the crossing within 24 hours, as feasible.
- Install erosion and sediment control measures, as discussed in the Soils section, to prevent the flow of spoil into any waterbodies.
- Maintain erosion and sediment control measures until streambanks and adjacent upland areas are stabilized.
- Reestablish pre-construction bed and bank contours, revegetate streambanks, and install erosion control fabric to stabilize the streambanks.
- Limit construction equipment working in wetlands to that essential for clearing, trench excavation, pipe fabrication and installation, backfilling, and restoration.
- Cut shrubs flush with the surface of the ground.
- Limit stump removal, grading, topsoil segregation, and excavation in wetlands to the area immediately over the trenchline to avoid excessive disruption of soils and the native seed and rootstock within the soils.
- Prohibit storage of hazardous materials, chemicals, fuels, lubricating oils, and concrete coating and refueling activities within 200 feet of any waterbody or wetland.
- Minimize erosion from upland areas by restoring and seeding the project area as discussed in the Vegetation and Soils sections.
- Withdraw and discharge hydrostatic test water in accordance with all applicable permits.
- Test water quality during withdrawal and discharge in accordance with permit stipulations and conditions.

Utilize screens on the intake hoses at surface water sources to prevent the entrapment of fish or other aquatic species and monitor the appropriation rate to ensure that adequate downstream flow is maintained to support aquatic life.

- Install energy-dissipating devices and/or filter bags to prevent scour, erosion, suspension of sediment, and damage to vegetation. Monitor discharge rates to ensure effectiveness of the energy-dissipating device.
- 22. The holder shall implement the following measure, which will be incorporated into the Plan of Development:
- Fence riparian areas on BLM-administered lands at Meeker-West milepost 24.5 (East Douglas Creek) and Meeker-West milepost 27.2 (West Douglas Creek). Fence will be installed around the incised banks and channel with a sufficient gap to allow passage of wildlife or livestock up or down the channel.
- 23. The holder shall minimize impacts to wildlife by implementing measures proposed in EnCana's Biological Resources Protection Plan (EnCana 2005b) and Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Install wildlife crossovers (trench plugs), with ramps on either side of the open trench, at maximum 1-mile intervals and at well-defined livestock and wildlife trails to facilitate passage of big game across the right-of-way and to prevent wildlife from becoming trapped in the trench.
- 24. The holder shall implement the following measures, which will be incorporated into the Plan of Development:
- Conduct pre-construction nesting raptor surveys each spring prior to construction. BLM-approved biologists would be required to meet with BLM biologists prior to initiating surveys and would conduct the surveys using BLM survey protocols.
 - Surveys would be conducted in suitable nesting habitat (mature pinyon-juniper woodland) for all accipiter species in Colorado. In areas where the proposed pipeline corridor parallels existing disturbance, surveys will be conducted 300 feet from the edge of the right-of-way. In areas where the proposed right-of-way does not parallel an existing disturbance (i.e., a deviation), surveys would be conducted within 2000 feet from the edge of the right-of-way for the portion of pinyon-juniper habitat being dislocated from the stand by the pipeline corridor and 300 feet from the edge of the right-of-way for the stand portion of the habitat. Surveys would be completed when the birds are either on eggs or when chicks are present. Construction activities would be prohibited within 0.25-miles of active nests between February 1st and August 15th in Colorado, or until fledging and dispersal of the young.
 - Surveys would be conducted in suitable nesting habitats within 1-mile of the proposed project for cliff nesting species in Colorado. Construction activities would be prohibited within 0.25-miles of active nests between February 1st and August 15th in Colorado, or until fledging and dispersal of the young.

- Surveys would be conducted in Utah by BLM approved biologists using BLM survey protocols. Timing restrictions and buffer zones for raptors in Utah are species-specific and would be determined after surveys are completed.
- Prohibit construction activities in critical mule deer winter range and substantial value elk winter range in Utah between November 1st and April 1st.
- Prohibit construction activities in severe/critical mule deer and elk winter range in Colorado between December 1st and April 30th.
- Commit to off-site mitigation to rectify the loss of approximately 50 acres of mule deer severe winter range due to construction of the gas plant. The basis of the off-site habitat improvement will be that for every acre physically disturbed within the gas plant location, 2.5 acres of off-site habitat improvement will be implemented to compensate for direct and indirect impacts. Off-site habitat enhancements may take a variety of forms, which will be determined through consultation with the BLM and CDOW. It is the intent of CDOW and BLM to design this mitigation work as close to the development site as possible to provide the most benefit for wintering mule deer displaced by the development. Off-site habitat improvements related to the gas plant will be implemented in the amount indicated by the 2.5X multiplier. The cost of these improvements shall be capped at a maximum average value of \$300.00 per acre
- Redistribute large, woody material salvaged during clearing operations on BLM WRFO-administered lands. Disperse materials over the portion of the right-of-way from which the trees and brush were originally removed to meet fire management objectives and to provide wildlife habitat, seedling protection and a deterrent to vehicular traffic. Woody materials dispersed across the right-of-way will not exceed 3 to 5 tons/acre. Excess woody materials may be mulched or made available for firewood or fenceposts.
- 25. The holder shall minimize impacts to transportation and roads by implementing proposed measures in EnCana's Plan of Development (EnCana 2005a), including the Fugitive Dust Control Plan (EnCana 2005g), Reclamation Plan (EnCana 2005j), and Transportation Management Plan (EnCana 2005p). The holder shall:
- Begin and end construction activities after the average workday, as practical, to minimize traffic congestion impacts to the public. Use the construction yards as the primary parking area for personal vehicles. Transport the majority of pipeline construction workers to the construction right-of-way by buses provided by the contractor.
- Install pipelines across county roads in accordance with Rio Blanco County, Garfield County, and Uintah County road crossing permits. County roads would be bored if paved and open-cut if unsurfaced, pending approval by county road engineers. Private roads would be crossed by the open-cut method.
- Comply with county and state weight restrictions and limitations.

- Control dust along unsurfaced access roads and minimize tracking of soil onto paved roads, as discussed in the Air Quality section.
- Maintain unsurfaced roads during construction of the project.
- Restore unsurfaced roads to equal or better condition than pre-construction levels after construction is complete.
- Repair damage on paved roads at pipeline crossings.
- 26. The holder shall implement the following measure, which will be incorporated into the Plan of Development:
- Develop measures to control unauthorized OHV use with the BLM and interested feelandowners. Measures would include leaving the right-of-way in a roughened state and scattering vegetative debris across the surface, placing dirt berms, rock, or vegetative barriers at intersections with existing roads, and randomly placing boulders, logs, and stumps across the right-of-way to discourage OHV use. The holder will be responsible for purchasing and installing OHV signage developed by the BLM WRFO.
- 27. The holder shall continue project discussion with the Rio Blanco County Road and Bridge Department and develop measures, as necessary, to mitigate impacts on Rio Blanco County Road 5.
- 28. Accidental fires and cheatgrass infestations would be minimized by implementing measures proposed in EnCana's Fire Prevention and Suppression Plan (EnCana 2005f), Noxious Weed Management Plan (EnCana 2005h), and Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Equip construction equipment operating with internal combustion engines with approved spark arresters.
- Carry fire-fighting equipment (long-handled round-point shovel and dry chemical fire extinguisher) on motor vehicles and equipment.
- Take immediate action to suppress accidental fires.
- 29. The holder shall implement the following measures, which will be incorporated into the Plan of Development:
- Create defensible space around the gas plant site and any aboveground appurtenances in accordance with Colorado Firewise guidelines (www.firewise.com).
- Construct new powerlines with defensible space. Defensible space should be achieved through an ecologically and aesthetically pleasing manner with thinning and mulching of trees and brush instead of removing all vegetation.

- Redistribute large, woody material salvaged during clearing operations on BLM WRFO-administered lands. Disperse materials over the portion of the right-of-way from which the trees and brush were originally removed to meet fire management objectives and to provide wildlife habitat, seedling protection and a deterrent to vehicular traffic. Woody materials dispersed across the right-of-way will not exceed 3 to 5 tons/acre. Excess woody materials may be mulched or made available for firewood or fenceposts as discussed for BLM GJFO-administered land in the Vegetation section.
- 30. The holder shall minimize impacts to woodlands by implementing measures proposed in EnCana's Plan of Development (EnCana 2005a) and Reclamation Plan (EnCana 2005j). The holder shall:
- Seed disturbed areas as discussed in the Vegetation section.
- 31. The holder shall implement the following, which will be incorporated into the Plan of Development:
- Acquire a Fuel Woods Permit and compensate the BLM for trees.
- Make timber available to the public for firewood or fenceposts on BLM GJFO-administered lands. De-limb the wood, cut in 4- to 8-foot lengths, and stockpile on the right-of-way or within approved temporary use areas at points where the right-of-way crosses access roads.
- Redistribute large, woody material salvaged during clearing operations on BLM WRFO-administered lands. Disperse materials over the portion of the right-of-way from which the trees and brush were originally removed to meet fire management objectives and to provide wildlife habitat, seedling protection and a deterrent to vehicular traffic. Woody materials dispersed across the right-of-way will not exceed 3 to 5 tons/acre. Excess woody materials may be mulched or made available for firewood or fenceposts as discussed for BLM GJFO-administered lands in stipulation 19 & 20.
- 32. The holder shall minimize impacts by implementing measures proposed in EnCana's Blasting Plan (EnCana 2005c), Reclamation Plan (EnCana 2005j), and Soil Conservation, Erosion, and Sedimentation Control Plan (EnCana 2005l), included in the Plan of Development (EnCana 2005a). The holder shall:
- Minimize effects of blasting and ensure public safety during blasting operations.
- Restore pre-construction contours and natural runoff and drainage patterns after construction activities are complete.
- Install temporary and permanent erosion control measures to control erosion and sediment transport as discussed in stipulation 18.

- 33. Construction-related noise would be minimized by muffling all vehicles and construction equipment and limiting construction activities to daylight hours as much as possible to avoid impacts to the public. Operational impacts would be minimized by installing hospital-grade mufflers on compressor engines and by designing the gas plant to meet state and Rio Blanco County noise regulations.
- 34. The holder shall minimize impacts to paleontological resources by implementing the following BLM mitigation measures. These measures would be incorporated into EnCana's Paleontological Resources Protection Plan (EnCana 2005i), included in the Plan of Development (EnCana 2005a). The holder shall:
- Monitor Condition I areas and spot-check Condition II areas during construction. A paleontological monitor shall be present at the gas plant site at any time it becomes necessary to excavate into the underlying bedrock formation.
- Inform all persons associated with the project that they would be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossils are uncovered during any project or construction activities, activities would stop in the immediate area of the find that might further disturb such materials, and the BLM Authorized Officer would be immediately contacted. A BLM-approved paleontologist would evaluate the find and determine site-specific recommendations and mitigation requirements. The discovery would be protected until notified to proceed, in writing, by the BLM Authorized Officer.
- Install temporary and permanent erosion control measures, as discussed in stipulation 18, to control erosion and sediment transport.
- 34. The holder shall minimize impacts on rangeland by implementing measures proposed in EnCana's Noxious Weed Management Plan (EnCana 2005h) and Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Brace and secure each fence crossed before cutting the opening needed for construction to
 prevent slacking of the wire. The opening would be closed by temporary gates as necessary
 or as requested by the fee-landowner to prevent passage of livestock. Fences will be braced
 and secured in accordance with BLM specifications (included in Attachment 3 of the Plan of
 Development).
- Install temporary fencing as required by pre-construction agreements with fee-landowners to prevent livestock entry into the construction right-of-way.
- Install livestock crossovers (trench plugs), with ramps on either side of the open trench, at maximum 1-mile intervals and at well-defined livestock and wildlife trails to facilitate passage of livestock across the right-of-way and to prevent livestock from becoming trapped in the trench.
- 36. The holder shall implement the following measures, which will be incorporated into the Plan of Development:

- Prohibit construction activities between Meeker-West mileposts 23.0 to 25.0 and 28.0 to 31.0 from April 16 to June 30 and from November 1 to January 31.
- Maintain the current condition and usability of stock ponds and other facilities along the right-of-way.
- Restore damaged livestock fences, gates, cattleguards, and brace panels to BLM or feelandowners specifications. BLM specifications are included in the Plan of Development. The holder will be responsible for all damages that occur because of negligence in maintaining the integrity of allotment and pasture boundary fences.
- 37. Damage to existing utilities would be minimized by implementing measures proposed in EnCana's Plan of Development and Safety Plan (EnCana 2005k), included in the Plan of Development (EnCana 2005a). The holder shall:
- Utilize the "One Call" system to locate and stake the centerline and limits of all underground facilities in the area of proposed excavation.
- Provide 48-hour notification to the owner/operator of and foreign pipeline prior to performing any work within 10 feet of buried or aboveground-pressurized gas piping.
- Prohibit machine excavation within 5 feet from any existing pipeline encountered in the right-of-way unless authorized by the pipeline owners/operators.
- 38. The holder will initiate discussions with Rio Blanco County to determine appropriate mitigation measures to offset demands on local services. The holder shall:
- Implement a health and safety program that would include training on-site supervisory personnel in First Aid and cardiopulmonary resuscitation (CPR).
- Provide security measures and/or personnel to patrol EnCana facilities.
- Continue project discussions with Rio Blanco County over the life of the project to determine appropriate mitigation measures, as necessary.
- 39. The holder shall acquire a Special Use Operator License from Rio Blanco County and would construct the plant in accordance with the Rio Blanco County Land Use Regulations. Visual contrast impacts would be minimized by implementing measures proposed in EnCana's Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Restore the right-of-way to as near as possible original contours and restore natural drainage and runoff patterns.
- Scatter salvaged vegetative debris randomly across the right-of-way.

- Restore the appearance of naturally rocky slopes and areas that have a natural gravel, cobble, or boulder veneer on the surface by layering or scattering rock across the right-of-way.
- 40. The holder shall implement the following measure, which will be incorporated into the Plan of Development:
- Paint all aboveground facilities Munsell Soil Chart Juniper Green.
- 41. The holder shall minimize impacts to wild horses by implementing measures proposed in EnCana's Biological Resources Protection Plan (EnCana 2005b) and Reclamation Plan (EnCana 2005j), included in the Plan of Development (EnCana 2005a). The holder shall:
- Install crossovers (trench plugs), with ramps on either side of the open trench, at maximum 1-mile intervals and at well-defined livestock and wildlife trails to facilitate passage of wild horses across the right-of-way and to prevent entrapment in the trench.
- 42. The holder shall implement the following measures, which will be incorporated into the Plan of Development:
- Avoid construction activities during recognized foaling season between March 1st and June 15th.
- Replace water sources disturbed during construction with equal sources of water in locations determined by BLM specialists.

Administrative Review and Appeal:

1 C. Walter

This decision may be appealed to the Interior Board of Land Appeals in accordance with the regulations in Title 43 Code of Federal Regulations, Part 4.400 and the enclosed form CSO 1840-6. The form also includes instructions for requesting a stay of the appealed decision. If an appeal is taken, the notice of appeal must be filed in this office at the above address within 30 days from receipt of this decision. The appellant has the burden of showing that the decision is in error.

11/04/05 Date:

Kent E. Walter

Field Manager

White River Field Office